Electronic Version
Stylesheet Version v1.1.1

NONLINEAR OVERLAP METHOD FOR TIME SCALING

Abstract

A nonlinear overlap method for time scaling to synthesize an $S_1[n]$ and an $S_2[n]$ into an $S_3[n]$ is disclosed. The $S_1[n]$ and the $S_2[n]$ having N_1 and N_2 signals respectively. The nonlinear overlap method includes the following steps: (a) delaying the $S_2[n]$ by a predetermined number and forming an $S_5[n]$, (b) establishing a correlogram of a cross-correlation function of the $S_1[n]$ and $S_5[n]$, and (c) setting $S_3[n]$ as a number of $S_1[n]$ when 0<=n<; as a number formed by overlap-adding the $S_1[n]$ and an $S_4[n]$ in a weighting manner when (the predetermined number + the maximum index + the first threshold) <= n < (N_1 - a second threshold); and as a number of S_4 wherein the first and second thresholds are not equal to zero at the same time, and the $S_4[n]$ is formed by delaying the $S_5[n]$ by the maximum index.